

Phase End Project

Taxi Service Automation using TestNG,Jenkins,Docker,AWS

Step1:

Create a maven project and add the dependencies for testng and chromedriver and perform maven install.Run the test scripts generate the report in the target output folder.Convert the file to a .jar using maven package.Used Goibibo web for taxi services tests

Step2:

Connect to a EC2 instance in AWS cloud install jdk and create a dir to get the jar file using `sudo wget <rawlink from github>` if its a spring boot project jar file the output will be displayed in a json format,here my jar file is of maven testng and to run the jar `java -jar <jarfilename>` , you can see the output i `http://<publicip>:80/<uri>`

Step3:

Create a jenkins pipeline and in the pipeline add the jenkins txt part and save.Now build and in the console the jar file will be automatically create ,with docker image .And in the docker console we can create and image and then push that image to the docker hub using docker commands.

TestNG.class

```
package com.test;

import org.openqa.selenium.By;
import org.openqa.selenium.Keys;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
import org.openqa.selenium.interactions.Actions;
import org.testng.annotations.AfterSuite;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeSuite;
import org.testng.annotations.BeforeTest;
```

```

import org.testng.annotations.Test;

public class Taxiservicetest {
    //initializing the public contents
    public WebDriver driver;
    public String baseURL="https://www.goibibo.com/cars/";

    @Test(priority=4)
    public void logintest() {
        WebElement
loginorsignup=driver.findElement(By.xpath("/html/body/div[1]/div[1]/header/div[2]/div"));
        loginorsignup.click();
        WebElement
inputph=driver.findElement(By.xpath("/html/body/div[1]/div[2]/div[1]/div/div/div[2]/div/div/form/div/input"));
        inputph.sendKeys("1234567891");
        WebElement
close=driver.findElement(By.xpath("/html/body/div[1]/div[2]/div[1]/div/div/div[2]/span"));
        close.click();
    }

    @Test(priority=1)
    public void radiotest() {
        WebElement radiochoice=driver.findElement(By.cssSelector("#Airport-transfer > span "));
        radiochoice.click();
    }

    @Test(priority=3)
    public void testone() {
        WebElement pickup =driver.findElement(By.id("downshift-1-input"));
        pickup.sendKeys("Mathikere, Bengaluru, Karnataka, India");
        WebElement drop = driver.findElement(By.id("downshift-2-input"));
        drop.sendKeys("Bagmane Tech Park, Krishnappa Garden, C V Raman Nagar, Bengaluru, Karnataka, India");
        WebElement
searchcabs=driver.findElement(By.xpath("/html/body/div[1]/section/section/section[1]/section/div[5]/button"));
        searchcabs.click();
        System.out.println("Searching cab..");
    }

    @Test(priority=2)
    public void Scrolltest() {
        //Scroll
        Actions scrollpage=new Actions(driver);
    }
}

```

```

scrollpage.sendKeys(Keys.PAGE_DOWN).sendKeys(Keys.PAGE_DOWN).pause(2000).sendKeys(Keys.PAGE_UP).build().perform();
}

```

```

@BeforeTest
public void beforeTest() {
    System.out.println("Starting..");
}

```

```

@AfterTest
public void afterTest() {
    System.out.println("Done!!");
}

```

```

@BeforeSuite
public void beforeSuite() {

```

```

    System.setProperty("webdriver.chrome.driver", "C:\\Users\\Swaroop\\Desktop\\EclipseWorkspace\\chromedriver.exe");
    driver= new ChromeDriver();
    driver.get(baseUrl);
}

```

```

@AfterSuite
public void afterSuite() {
    driver.close();
}
}

```

Docker Script

```

FROM eclipse-temurin:17-jdk-alpine
VOLUME /tmp
COPY target/*.jar app.jar
ENTRYPOINT ["java","-jar","/app.jar"]

```

Jenkins pipeline

```

pipeline{
    agent any
    tools {
        // Install the Maven version configured as "M3" and add it to
the path.
        maven "default"
        //jdk "java1"
    }
    stages {

```

```

stage('Maven Build') {

    steps {
        dir('C:/Users/Swaroop/Desktop/EclipseWorkspace/TaxiService') {
            bat "mvn -Dmaven.test.skip=true clean package"
        }
    }
}

stage('Docker Image Creation') {

    steps {
        dir('C:/Users/Swaroop/Desktop/EclipseWorkspace/TaxiService') {
            bat "docker build -t taxi --output type=docker ."
        }
    }
}

stage('Docker Hub Push') {

    steps {
        bat "docker tag taxi swaroopav21/taxi"
        bat "docker push swaroopav21/taxi"
    }
}

```

Pom.xml

```

<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
    <modelVersion>4.0.0</modelVersion>
    <groupId>TaxiService</groupId>
    <artifactId>TaxiService</artifactId>
    <version>0.0.1-SNAPSHOT</version>

    <dependencies>
        <!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java -->
        <dependency>
            <groupId>org.seleniumhq.selenium</groupId>
            <artifactId>selenium-java</artifactId>
            <version>4.10.0</version>
        </dependency>
        <!-- for chrome and for edge we can change in the artifactId -->
        <!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-chrome-driver -->
        <dependency>
            <groupId>org.seleniumhq.selenium</groupId>
            <artifactId>selenium-chrome-driver</artifactId>
            <version>4.10.0</version>

```

```

</dependency>

<!-- TestNG dependency and the configuration file from ln46-->
<dependency>
    <groupId>org.testng</groupId>
    <artifactId>testng</artifactId>
    <version>7.8.0</version>
    <scope>compile</scope>
</dependency>

<!-- ReportNG dependencies-->
<dependency>
    <groupId>org.uncommons</groupId>
    <artifactId>reportng</artifactId>
    <version>1.1.4</version>
</dependency>
<dependency>
    <groupId>com.google.inject</groupId>
    <artifactId>guice</artifactId>
    <version>4.2.2</version>
</dependency>

</dependencies>

<build>
    <plugins>
        <plugin>
            <groupId>org.apache.maven.plugins</groupId>
            <artifactId>maven-compiler-plugin</artifactId>
            <configuration>
                <source>1.8</source>
                <target>1.8</target>
            </configuration>
        </plugin>
        <plugin>
            <groupId>org.apache.maven.plugins</groupId>
            <artifactId>maven-surefire-plugin</artifactId>
            <!-- For testng-->
            <configuration>
                <suiteXmlFiles>
                    <suiteXmlFile>testng.xml</suiteXmlFile>
                </suiteXmlFiles>
                <!-- Properties for ReportNg-->
            </configuration>
            <properties>
                <property>
                    <name>usedefaultlisteners</name>
                    <value>>false</value>
                </property>
            </properties>
        </plugin>
    </plugins>
</build>

```

```

        <property>
            <name>listener</name>

<value>org.uncommons.reportng.HTMLReporter,

org.uncommons.reportng.JUnitXMLReporter
        </value>
        </property>
    </properties>
</configuration>
</plugin>
</plugins>
</build>
</project>






















```

testng.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "https://testng.org/testng-1.0.dtd">
<suite name="Suite">
    <test thread-count="5" name="Test" parallel="methods">
        <classes>
            <class name="com.test.Taxiservicetest"/>
        </classes>
    </test> <!-- Test -->
</suite> <!-- Suite -->

```

- ▼  TaxiService
 - >  src/main/java
 - >  src/main/resources
 - >  src/test/java
 - >  src/test/resources
 - >  JRE System Library [JavaSE-1.8]
 - >  Maven Dependencies
 - >  target/generated-sources/annotations
 - >  target/generated-test-sources/test-annotations
 - >  src
 - ▼  target
 - >  generated-sources
 - >  generated-test-sources
 - >  maven-archiver
 - >  maven-status
 -  TaxiService-0.0.1-SNAPSHOT.jar
 - >  test-output
 -  Dockerfile
 -  Jenkins.txt
 -  pom.xml
 -  testng.xml

Times for Suite

Total running time: 4 seconds

| Number | Method | Class | Time (ms) |
|--------|------------|--------------------------|-----------|
| 0 | Scrolltest | com.test.Taxiservicetest | 2,809 |
| 1 | testone | com.test.Taxiservicetest | 648 |
| 2 | logintest | com.test.Taxiservicetest | 368 |
| 3 | radiotest | com.test.Taxiservicetest | 264 |

1 suite

✓ com.test.Taxiservicetest

Scrolltest

logintest

radiotest

testone

```
Suite
Total tests run: 4, Passes: 4, Failures: 0, Skips: 0
```

| | | | | | | | | | | |
|-------------------------------------|------|---------------------|----------------------|--|----------|---|-----------|--|------------|----------------|
| <input checked="" type="checkbox"/> | Taxi | i-0e4f14b9306cad2c6 | Running | | t2.micro | - | No alarms | | us-east-1d | ec2-44-202-37- |
|-------------------------------------|------|---------------------|----------------------|--|----------|---|-----------|--|------------|----------------|

Instance: i-0e4f14b9306cad2c6 (Taxi)

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

Status checks

Info

Status checks detect problems that may impair i-0e4f14b9306cad2c6 (Taxi) from running your applications.

System status checks

Instance status checks

✔ Running

✔ Running

Report the instance status if our checks do not reflect your experience with this instance or if they do not detect issues you are having.

Report instance status

Dashboard > TaxiservicePipeline > Configuration

Configure

General

Advanced Project Options

Pipeline

Advanced Project Options

Advanced

Pipeline

Definition

Pipeline script

Script

```
1 pipeline{
2   agent any
3
4   tools {
5     // Install the maven version configured as "m2" and add it to the path.
6     maven "default"
7     //jdk "java1"
8   }
9
10  stages {
11    stage('Maven Build') {
12      steps {
13        dir('C:/Users/Swaroop/Desktop/EclipseWorkspace/Taxiservice') {
14          bat "mvn -Dmaven.test.skip=true clean package"
15        }
16      }
17    }
18  }
19 }
```

☒ Use Groovy Sandbox

[Pipeline Syntax](#)

Save

Apply

Dashboard > TaxiservicePipeline >

Status

Changes

Build Now

Configure

Delete Pipeline

Full Stage View

Rename

Pipeline Syntax

Build History

trend

Filter builds...

#2

Jul 31, 2023, 9:06 PM

#1

Jul 31, 2023, 6:25 PM

Atom feed for all

Atom feed for failures

Pipeline TaxiservicePipeline

Stage View

| | Declarative: Tool Install | Maven Build |
|--|---------------------------|-------------|
| Average stage times: (Average full run time: ~1min 19s) | 2s | 1min 7s |
| #2 Jul 31 21:06 No Changes | | |
| #1 Jul 31 18:25 No Changes | 2s | 1min 7s |

Permalinks

- Last build (#1), 2 hr 40 min ago
- Last stable build (#1), 2 hr 40 min ago
- Last successful build (#1), 2 hr 40 min ago
- Last completed build (#1), 2 hr 40 min ago

Console Output

```
Started by user Swaroop A V
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in C:\ProgramData\Jenkins\jenkins\workspace\TaxiservicePipeline
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Tool Install)
[Pipeline] tool
[Pipeline] envVarsForTool
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Maven Build)
[Pipeline] tool
[Pipeline] envVarsForTool
[Pipeline] withEnv
[Pipeline] {
[Pipeline] dir
Running in C:/Users/Swaroop/Desktop/EclipseWorkspace/Taxiservice
[Pipeline] {
[Pipeline] bat

C:\Users\Swaroop\Desktop\EclipseWorkspace\Taxiservice>mvn -Dmaven.test.skip=true clean package
[INFO] Scanning for projects...
[WARNING]
[WARNING] Some problems were encountered while building the effective model for Taxiservice:Taxiservice:jar:0.0.1-SNAPSHOT
[WARNING] 'build.plugins.plugin.version' for org.apache.maven.plugins:maven-compiler-plugin is missing. @ line 47, column 12
```


```
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

Building an image in docker and pushing it to docker hub

```
swaroopvmphasis@ip-172-31-82-53:~/Desktop$ docker build -t taxi --output type=docker .
Sending build context to Docker daemon 21.5kB
Step 1/4 : FROM eclipse-temurin:17-jdk-alpine
17-jdk-alpine: Pulling from library/eclipse-temurin
31e352740f53: Pull complete
8aad9aaa732: Pull complete
eeaf3196661f: Pull complete
5463adbbb67d: Pull complete
Digest: sha256:3ecc5edd648f5d9c92e53e8eb6361cfcfaf626220f8308332f239dfb03418c1c
Status: Downloaded newer image for eclipse-temurin:17-jdk-alpine
--> 31bcd4949df
Step 2/4 : VOLUME /tmp
--> Running in 341b0e4a558b
Removing intermediate container 341b0e4a558b
--> 6bf91795fd2e
Step 3/4 : COPY target/*.jar app.jar
COPY failed: no source files were specified
swaroopvmphasis@ip-172-31-82-53:~/Desktop$
```

```
swaroopvmphasis@ip-172-31-82-53:~/Desktop$ docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
taxi                 latest          6bf91795fd2e   6 minutes ago  300MB
eclipse-temurin     17-jdk-alpine  31bcd4949df    5 days ago     300MB
hello-world         latest         bf756fb1ae65   3 years ago    13.3kB
swaroopvmphasis@ip-172-31-82-53:~/Desktop$
```

```
swaroopvmphasis@ip-172-31-82-53:~/Desktop$ docker image ls
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
taxii               latest          6bf91795fd2e   21 minutes ago  300MB
taxi                latest          6bf91795fd2e   21 minutes ago  300MB
eclipse-temurin    17-jdk-alpine  31bcd4949df    5 days ago     300MB
hello-world        latest         bf756fb1ae65   3 years ago    13.3kB
swaroopvmphasis@ip-172-31-82-53:~/Desktop$ docker tag taxi:latest swaroopav21/taxiimage:taxiimg
swaroopvmphasis@ip-172-31-82-53:~/Desktop$ docker push swaroopav21/taxiimage:taxiimg
The push refers to repository [docker.io/swaroopav21/taxiimage]
23d7182b8e52: Pushed
644a85248299: Pushed
4aab2363d488: Pushed
78a822fe2a2d: Pushed
taxiimg: digest: sha256:ee56dc8d6132d22ba04fd0b71b2359b84e457d81ecb663daead373a1b7333854 size: 1159
swaroopvmphasis@ip-172-31-82-53:~/Desktop$
```

 **docker hub**

Explore Repositories Organizations Help Upgrade swaroopav21

swaroopav21

Search by repository name


All Content

Create repository

swaroopav21 / taxiimage

Contains: Image | Last pushed: 3 minutes ago

Inactive ☆ 0 ⬇ 0 🌐 Public



Create an Organization
Manage Docker Hub repositories
with your team

